

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015208**Date Inspected:** 15-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Xu Tao / Mr. Li Yan Hua**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)/TOWER**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 16

This QA Inspector Randomly observed the following work in progress:

Submerged Arc Welding (SAW) of weld joint BP3074-001-005. Welder is identified as 045265. ZPMC Quality Control (QC) is identified as Mr. Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

LAY DOWN YARD

Segment:12AW

Shielded Metal Arc Welding (SMAW) of weld joint SEG3004J-221. Welder is identified as 051348. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2214-TC-U4b-FCM-1.

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Segment: 11DW

SMAW Repair welding of weld joint SEG071A-032. Welder is identified as 047864. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-4G (4F)-FCM-Repair.

The repair welding was been performed as per the Welding Repair Report (WRR) No: B-WR13571. This weld was rejected by ZPMC UT Technicians and recorded on UT Report No: B787-UT-13382.

SMAW of weld joint SSD10A-PP104-233. Welder is identified as 067764. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2214-TC-U4b-FCM-1.

Segment: 11DE-FL3 Location.

During random in process Visual Inspection this QA Inspector observed 1 (one) Arc strike on the Side plate number identified as SP638B near to the weld No: SEG072A-017. The "Y" location is approximately 1500 mm from the weld toe. This QA informed to ZPMC Quality Control (QC) identified as Mr. Li Ping of the above issue, As per ZPMC QC the arc strike shall be repaired and perform Magnetic Particle Testing (MT) for verifying no more defects.

Refer attached photos for additional details.

TOWER JETTY

This QA Inspector witnessed final Bolt tension verification for the Lift 1 West and North Tower Grating supports. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed as per the ZPMC submitted Notification No. 00382 and 00383 respectively, dated: June 15, 2010.

Details of bolt size, RC Set # and final torque value are as follows:

Bolt sizes used were M22X55, RC Set# DHGM220011 and final torque value was 457 N-m/960 N-m (turn nut/bolt head respectively).

Bolt sizes used were M22X65, RC Set# DHGM220035 and final torque value was 433 N-m.

Manual Torque wrenches were used with serial number noted as XO2-777 and XO-185.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372 / Michael Ng 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
